



NATIONAL BACKGROUND REPORT ON AGRO-FOOD RESEARCH FOR KOSOVO (under UNSCR 1244)

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Editor's note

The aim of this report is to describe and estimate the state and performance of agro-food research in Kosovo¹. This report is a country-specific synthesis of the available statistical information. This paper was prepared based on information from different sources.

Core references are reports of the Statistical Office of Kosovo, European Commission as well as Kosovo's national strategies.

Also, European Commission (EC) authored Kosovo Progress Reports are included in the paper, as well as analytical reports and communications by European institutions and information from Food Agriculture Organisation (FAO), United States Agency for International Development (USAID) and other development agencies.

Other important sources of information were: the Kosovo Green book, the Ministry of Environment and Spatial Planning (MESP) strategy and various documents from the Ministry of Agriculture, Forestry and Rural Development (MAFRD), Ministry of Economy and Finance (MEF), as well as reports from national and international experts. In course of research, interviews were used to identify key elements of agro-food research position in Kosovo, and to inform the SWOT analysis of the thematic field.

The report provides a brief overview of the agro-food research in Kosovo. It includes key facts and figures concerning policy framework, current trends as well as short overview of main drivers of agro-food research in Kosovo.

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List of abbreviations

ATP	Autonomous Trade Preference
AC	Association of Consumers
ARDP	Agriculture Rural Development Plan
ASO	Austrian Science and Research Liaison Offices
BOKU	Universität für Bodenkultur Wien
CEFTA	Central European Free Trade Agreement
EAP	Environmental Action Program
EAR	European Agency for Reconstruction
ERA	European Research Area
EC	European Commission
EC	European Council
ESDP	European Security and Defence Policy
EU	European Union
FAO	Food Agriculture Organisation
FP	Framework Programme
FRY	Federal Republic of Yugoslavia
GDP	Gross Domestic Product
GTZ	Gesellschaft für Technische Zusammenarbeit
GAP	Good Agriculture Practice
HACCP	Hazard Analyses Critical Control Points
HFC	Household Final Consumption
IBRD	International Bank for Reconstruction and Development
IMF	International Monetary Fund
ISO	International Organization for Standardization
KAIP	Kosovo Austria International Projects
KASA	Kosovo Academy of Science and Arts
KCB	Kosovo Consolidated Budget
KEAP	Kosovo Environmental Action Plan
KHMI	Kosovo Hydro-Meteorological Institute
KIA	Kosovo Institute of Agriculture
KVFA	Kosovo Veterinary Food Agency
MAFRD	Ministry of Agriculture, Forestry and Rural Development
MEF	Ministry of Economy and Finance
MESP	Ministry of Environment and Spatial Planning

MEST	Ministry of Education, Science and Technology
MMM	Monthly Macro Monitor
MoH	Ministry of Health
NARS	National Agricultural Research System
NCS	National Council for Science
NGO	Non-Governmental Organizations
NIPHK	National Institute of Public Health of Kosovo
OAAK	Organic Agriculture Association of Kosovo
R&D	Research and Development
SAP	Stabilization and Association Process
SEEDNet	South East European Development Network
SIDA	Swedish International Development Cooperation Agency
SITC	Standard International Trade Classification
SOE	Socially Owned Enterprises
SWOT	Strengths, Weaknesses, Opportunities and Threats
US	United State
USAID	United States Agency for International Development
WB	World Bank
WBC	Western Balkan Countries
WUS	World University Service-Austria
WYG	Wide Youth Green

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Executive Summary

Kosovo is undergoing important reforms in its agricultural policy with the aim of approximating to European Union (EU) regulations. The agriculture sector in Kosovo is in a difficult position. Of Kosovo's total surface area of 1.1 million ha, around 53 % considered to be agricultural land, whereas 41 % are forests and 6 % belong to other land uses (Statistical Office of Kosovo 2008c). In the agricultural sector, many farms and their machinery were destroyed during the war in 1999 and the whole sector, which was organised around cooperatives and agrokombinats (state farms) during socialism, was reorganised in a still ongoing process of privatisation. Nevertheless, given an employment share of 21.4 % (Statistical Office of Kosovo 2007a), agriculture is among the region's main economic activities.

According to the data provided by the Statistical Office of Kosovo (2008b), the agricultural sector may be characterised as follows: about 88 % of the agricultural land is private, whereas about 12 % is public/state property. Around 93 % of the agriculture land belongs to small farms, each comprising less than 5 ha. The average farm size is only 1.5 ha.

The larger part of the agricultural land (59 %) has been used as arable land (Fig. 1). In 1991, the population was 63 % rural. Estimates for 2000 are that the rural population is about 60 %. Whilst trends are not easy to predict, it seems that rapid urbanization will continue. This will decrease the number of people living in rural areas who generate their income from agricultural activities.

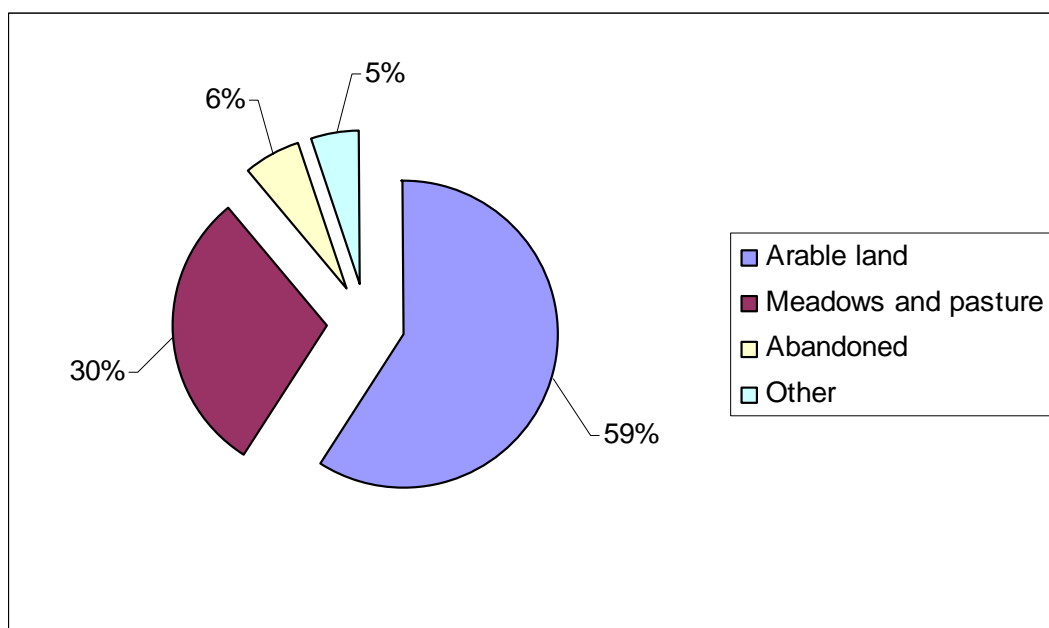


Fig. 1. Proportions of land-use classes contributing to the agricultural land of Kosovo
Source: Statistical Office of Kosovo (2008b).

Agriculture was traditionally one of the most important economic sectors of Kosovo. Today, agriculture is neglected, and most agricultural products are imported. There are many factors in favour of agriculture development based on the principles of organic production (Mehmeti, 2008).

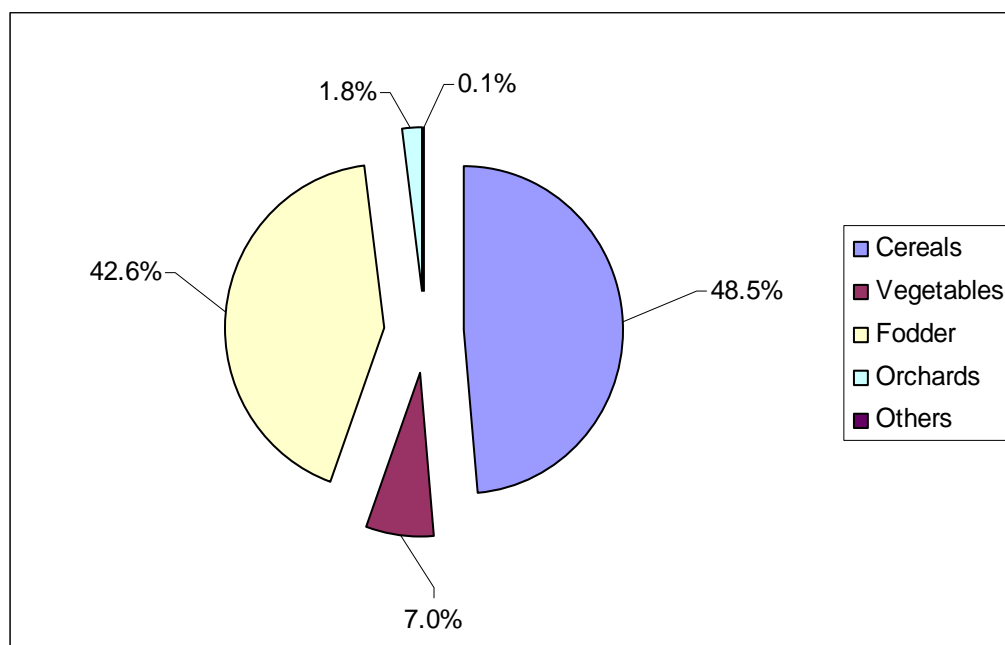


Fig. 2. Proportions of crop classes in the arable land of Kosovo.
Source: Statistical Office of Kosovo (2008b).

Agriculture contributes about 30 % to Kosovo's Gross Domestic Product (GDP). Proper quality control system of domestically grown and imported products is not yet in place.

Kosovo is a large importer of agricultural products (467 million Euro, or 24 %) of total imports in 2008. The ratio of food imports to total imports in 2000 was about 27 %, peaking in 2003 at 34 % and falling to 24 % in 2008.

Table. 1. Imports by commodity group, (€ million)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
Food	169	283	300	330	293	288	315	378	467
Other	465	592	689	639	737	892	990	1,198	1,461
Total import	635	874	989	968	1,030	1,180	1,305	1,576	1,928
Total (% of food)	27	32	30	34	29	24	23	24	24

Source: MEF, MPD, MMM, January 2005, SOK Monthly Bulletin 04/2006 & Ministry of Public Administration, External trade, 2008

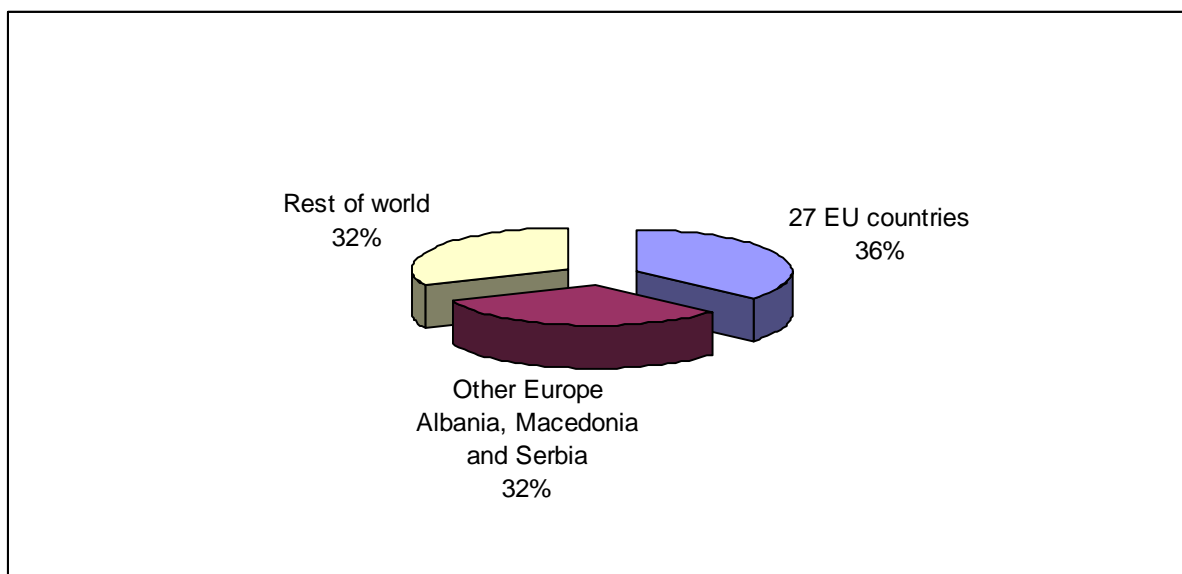


Fig. 3. Import participation by countries in rapport with the total
 Source: *External Trade 2008*

From the total import of food, prepared foodstuffs, beverages and tobacco represent (57 %), followed by vegetable products (20 %), live animals (19 %) and animal and vegetable fats (4 %).

Table. 2. Import of Food Products, End of 2005

	<i>Million Euro</i>
1. Live animals and animal products	54.3
2. Vegetable products	57.5
3. Animal or vegetable fats and oils, and related products; prepared edible fats; animal or vegetable waxes	11.2
4. Prepared foodstuffs, beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes	65.0
Total	288.0

Source: *UNMIK Customs data, 2005*

Export of food and agricultural products from Kosovo is very small 20.6 million € in 2008. About 28 % of total exports in 2000 were of food products, compared to 10 % in 2008.

Table. 3. Exports by commodity group, (€ million)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
Food	5.3	1.5	3.8	7.6	10.3	7.8	11.5	14.6	20.6
Other	13.4	9.1	23.5	28.6	46.4	41.1	99.0	150	178
Total export	18.7	10.6	27.3	36.2	56.7	48.9	110.7	165.1	198.4
Total (% of food)	28	14	14	21	9	16	10	11	10

Source: MEF, MPD, MMM, January 2005, SOK Monthly Bulletin 04/2006& Ministry of Public Administration, External trade (SITC), 2008

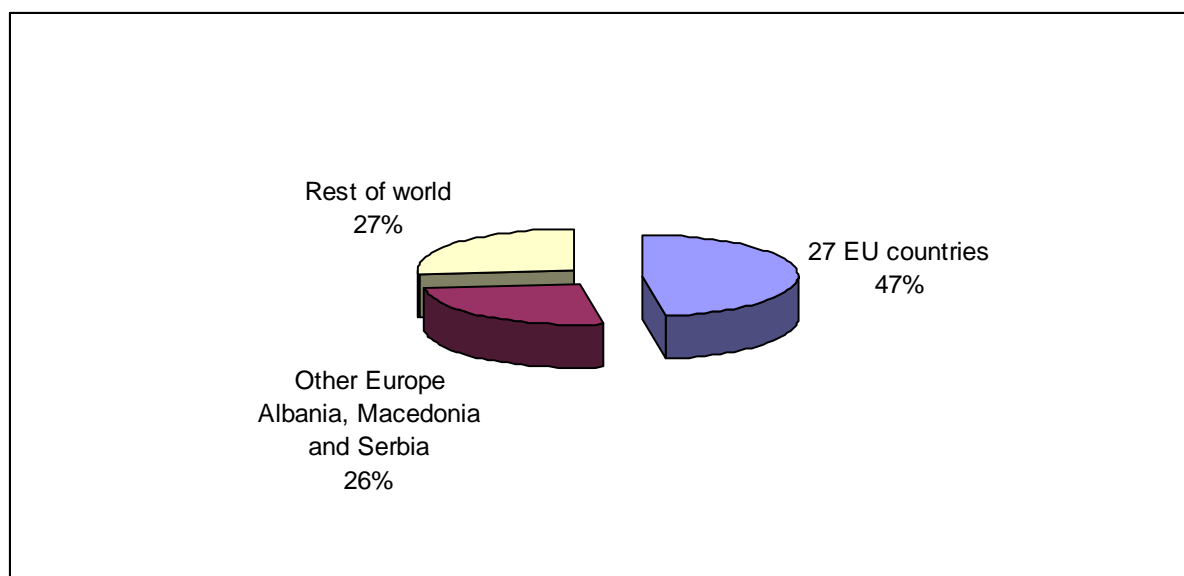


Fig. 4. Export participation by countries in Import participation by countries in raport with the total

Source: External Trade (SITC) 2008

Many farms in Kosovo are abandoned, while infrastructure is partially or fully damaged. Due to the present unclear situation still unresolved status of public property, low level of overall agricultural production, and low use of pesticides and artificial fertilizers, Kosovo can explore which direction will give optimal results. Organic agriculture is a real option. MAFRD and MESP are committed to improve the situation of agriculture and environment protection, and work for sustainable development in Kosovo.

In 2000-2009, the sectoral share of Gross Domestic Product (GDP) changed significantly. Despite a fall of share in recent years, Kosovo's agriculture remains an important creator of national wealth.

Table. 4. Agriculture and the national economy, 2000-2005

Year	2000	2001	2002	2003	2004	2005
Real GDP growth (%)	25.7	1.2	3.1	3.2	-	-
Contribution of agriculture	30	30	30	30	25	19
Of Industry	-	-	7	7	-	-
Of Construction	-	-	8	8	-	-
Of Services	-	-	3	2	-	-
Employment total Kosovo in (000)	-	229	263	415	-	-
Agriculture (%)	-	-	-	125	-	-

Source: IMF estimates Nov 2004, KNA –Janusz Szyrmer and MEF – MPD, FAO and MEF published 2005

The contribution of agriculture to GDP is high with 30 % due to the decreasing contribution of industry and other sectors to GDP, rather than as a result of development of agriculture. The sector's contribution to GDP/share of employment ratio indicates that the efficiency of the Kosovo agricultural sector is low. However, a substantial improvement in efficiency would reduce the number of people employed in the agricultural sector. Constantly declining agricultural employment and loss of household income could damage the sustainability of rural communities, unless alternative economic activities are developed.

The Kosovo GDP had increased during the period 2004-2007 from 3006,1 € to 3433,6 million €. GDP per capita followed the same trend, from 1.473 € in 2004 to 1.612 € in 2007. The main component of GDP is the Household Final Consumption (HFC), which increased from 2539,5 million € in 2004 to 3248,4 million € in 2007 (Gross Domestic Product 2004 – 2007)

The consumption is based in a big proportion on imports of goods and services. These contributed with about 50 % to the total consumption of population. The Gross Capital Formation contributed to 26 % to the GDP in 2007. Expenditures of the general government represented 24.5 % of the total GDP in 2004 and 18.7 % in 2007. (Gross Domestic Product 2004 – 2007).

Table. 5. Contribution to GDP by sector and year (%)

Year	1971	1980	1995	1996	2003	2004	2005
Agriculture	28.2	18.6	34.2	28.8	30	30	19
Industry	33.3	36.4	37.0	33.8	7	n/a	-
Other sectors	38.5	45.0	28.8	37.4	63	n/a	-
Total	100.0	100.0	100.0	100.0	100.0	n/a	-

Source: Statistical yearbook of Kosovo and of FRY 03 and IMF staff estimates 2004, FAO and MEF 2005

Based on, Tax Administration data, the number of registered tax paying enterprises in the Agriculture sector is rather small compared to other trades, and in addition, showed a significant decrease from 256 in 2004 to 207 by the end of September 2005.

Table. 6. Number of Registered Businesses, End of September 2005

	Total	Agriculture	Industry	Trade
2004	19,812	256	3,155	16,401
2005	17,208	207	2,670	14,331

Source: MEF, end of September 2005

This national background report on agro-food research has been prepared in October 2009 within the framework of the Western Balkan Countries INCO-NET project (WBC-INCO.net), which aims to contribute to integration of the Western Balkan Countries (WBC) in the European Research Area (ERA). The initiative is supported by the European Commission under the 7th Framework Programme for Research and Technological Development (FP7).

The report provides a brief overview of the agro-food research environment in Kosovo. It includes key facts and figures concerning policy framework, as well as brief overview of main drivers of agro-food research, research infrastructure and main agro-food sector trends in Kosovo.

The aim of this report is to describe and estimate the state and performance of agro-food research in Kosovo. This report is a country-specific synthesis based on the available statistical information from (Statistical Office of Kosovo, Ministry of Economy and Finance and Ministry of Agriculture, Forestry and Rural Development) and consultation with agriculture and veterinary experts, academic research actors, stakeholders and other relevant factors in Kosovo in order to identify key elements of agro-food research position in Kosovo.

The strengths, weaknesses, opportunities and threats (SWOT) analysis technique was utilized to match the environment threats and opportunities with the weaknesses and especially strengths within agro-food research capacities. The final Strategic Research Agenda identified a set of six agro-food research priorities for Kosovo. The Agro-food Strategic Research Agenda is intended to contribute to the shaping of future European Union (EU)-Western Balkan research co-operation, through relevant European Commission (EC) research policies and funding programmes in a way that meets the interests and actual needs of regional agro-food research area.

Introduction

Having occupied the central position in the Balkan Peninsula, Kosovo represents important connection between Central and South Europe, Adriatic Sea and Black Sea. According to (Statistical office of Kosovo, 2008c), Kosovo has about 2 million inhabitants and density is about 193 people per km², and is divided into 33 municipalities. This includes 82-90 % ethnic Albanians, other communities include Serbs, Bosnians, Romas and Turks of which 60 % live in rural areas. The Kosovo population is by far the youngest in Europe, with more than half the people below the age of 25. Agriculture is the main economic activity and also the sector that provides most employment in post-war Kosovo.

Agriculture is considered strategic sector of Kosovo. During the 1990s agricultural productivity in Kosovo was substantially lower than during the previous decade, and substantially less than average of Western European countries.

The near-destruction of Kosovo's agricultural sector, once the key component of the economy, was a major consequence of the conflict in 1998-1999. Rural population was displaced, crops and machinery were either destroyed or seriously damaged, and the livestock more than halved. In 1989, with the development of other economic activities, particularly mines and textiles, only 26 % of the population was occupied in agriculture. Both farming and migration to Western European countries acted as buffers to absorb the workforce expelled from the civil administration and Socially-Owned Enterprises (SOE), after the take over by the Serbian Administration of the control of Kosovo.

The World Bank (WB), Poverty Assessment World Bank report, (Kosovo Interim Strategy, 2007) indicates that 45 % of the Kosovo's population lives below the poverty line with another 18 % vulnerable to poverty. On the other hand, 15 % of the population is extremely poor defined as individuals who have difficulty to meet their nutritional needs.

War in Kosovo (1998-1999), contributed to the general crisis, affecting economy also Agriculture. Emergency phase was main challenge for Kosovo's people. International, post-conflict, assistance had contributed in the sector of agriculture as well other sectors.

Following a decade of rapid economic decline caused by political oppression and armed conflict, during the period 1999-2009 Kosovo has faced numerous challenges, and agricultural sector was no exception. Significant improvement was made due to aid from

development partner's international and inter-governmental organizations, governmental agencies and the Non-Governmental Organizations (NGO) sector.

On 17 February 2008 the Kosovo Assembly adopted a resolution which declared Kosovo to be independent. Kosovo is embracing the European agenda and is determined to move closer to Europe. Almost all instruments under the Stabilization and Association Process (SAP) are open to Kosovo. The European Partnership lists priorities to be addressed by Kosovo's authorities in the short and medium term.

In response to this identification of priorities, the authorities are requested to draw up an Action Plan for the implementation of the European Partnership, which provides an agenda against which to measure progress of the countries in meeting European standards. Kosovo's objective is to be a member of the EU, to work according to the EU directives and standards (free movement of goods and capital, customs and taxation, statistics, rural development, environment, transport etc.), *Acquis Communautaire*.

In February 2008, the European Union Member States agreed to a Joint Action to establish a European Security and Defence Policy (ESDP) rule of law mission, known as "EULEX", in Kosovo. The main task of the mission is to mentor, monitor and advice. EULEX also has some executive functions. European Council (EC) reconfirmed willingness to assist the economic and political development of Kosovo through a clear European perspective, in line with the European perspective of the region.

1. Purpose of the national background report and methodology/summary of the consultation process

This National report is compiled within the framework of WBC-INCO.net project and its main goal is to provide an overview of the current situation in the agro-food sector in Kosovo regarding main agro-food indicators and research policies. The report is based mainly on quantitative data gathered from different sources. The report also includes a SWOT analysis of the agro-food research capacities.

Consultation process in Kosovo took place during September-October 2009 which included several face to face and phone interviews conducted during the data collection phase. Consultation process involved the following stakeholders:

- National research and development policy-makers: Ministry of Agriculture, Forestry and Rural Development (MAFRD), Ministry of Trade and Industry (MTI), Ministry of Health (MoH), Ministry of Education, Science and Technology (MEST), Ministry of Economy and Finance (MEF).
- Research actors: Kosovo Academy for Sciences and Arts (KASA), University of Prishtina (Faculty of Agriculture and Veterinary, Faculty of Natural Sciences and Mathematics), Kosovo Institute of Agriculture (KIA), National Institute of Public Health of Kosova (NIPHK), Kosovo Hydro-Meteorological Institute (KHMI).
- International, governmental and nongovernmental organizations involved in agro-food issues and agro-food research in Kosovo EU, European Agency for reconstruction (EAR), United States Agency for International Development (USAID), World University Service-Austria (WUS), Gesellschaft für Technische Zusammenarbeit (GTZ), WB etc.
- Local NGOs from different agro-food sector: Organic Agriculture Association of Kosovo (OAAK), Association of Consumers (AC) etc.

The national background report on agro-food research identified a set of six agro-food research priorities for Kosovo, which are presented further below. The biggest problem was the lack of a centralized data collection system, and a high degree of fragmentation of the research data.

2. The Agro-food S&T System in Kosovo

One decade after the peace was restored in the country, Kosovo has not set up a fully fledged scientific research system yet. National economy remains too weak to support research and development, as it is not able to absorb the products of research and benefit from them. Research activities remain sporadic and marginal, based mainly on individual initiatives in the university sector and with almost no support from Government, which remains focused on teaching component of higher education. Public expenditures for research and innovation in Kosovo remain at level of 0.1 % of the GDP, indicating minimum conditions for any scientific and research work. This funding is mostly used to cover operational costs of the existing research institutions (Pupovci D, 2008).

Besides a lack of financial support and capacities for research in Kosovo, there is not enough interest among institutions to use opportunities available for the development of science and technology, such as 7th Framework Program of the European Commission.

2.1. Kosovo agro-food policy framework

The basis of the policy framework is set up by Kosovo Assembly and Government, which adopt and implement legislative acts. The Kosovo Assembly has three operating Committees that regulate the legal framework in areas of agro-food and research:

- 1. Committee for Agriculture, Forestry and Rural Development, Environmental and Spatial Planning*, responsible for planning general strategy on agriculture development, forestry and rural environments in Kosovo, following the most advanced examples in the fields.
- 2. Committee for Education, Science, Technology, Culture, Youth and Sports*, which reviews legislation and policies related to all levels of education, as well as to the field of science and technology.
- 3. Committee for Health, Work and Social Welfare*, responsible for monitoring the implementation of health related legislation and policies by the Government of Kosovo

Agro-food research activities in Kosovo are partially regulated by several laws and policy documents:

- a. The Law on Scientific Research Activity
- b. Strategy for Development of Higher Education in Kosovo (2005-2015).
- c. Kosovo Environmental Action Plan
- d. Law on Organic Agriculture
- e. Law for Veterinary
- f. Law on Food

a. The Law on scientific research activities

The most important document that regulates the area of research in Kosovo is the Law on Scientific Research Activity, which defines establishment, activity, organizing, governance and termination of public legal persons in scientific-research activity field; status of National Council for Science (NCS); and other issues related to scientific-research activity in Kosovo.”

Scientific research according to this Law, includes fundamental, applicative and development research. For the purpose of fulfilling the necessary conditions and providing the means, the Law prescribes that up to 0.7 % of GDP shall be allocated through the Kosovo Consolidated Budget for the purpose of research.

In July 2007 Kosovo Assembly elected the NCS of Kosovo composed of 15 members. The decision of the Assembly was implemented only in October 2008 when the first meeting of the Council took place. The Council is in the process of developing a five-year National Research Program for Kosovo, but the negotiations with the Government to start working on this project are still ongoing.

b. Strategy for Development of Higher Education in Kosovo (2005-2015)

The Ministry of Education, Science and Technology set up structures to support research activities in Kosovo: the Department of Science, the Centre for Innovations and Transfer of Technology, and the Centre for International Co-operation in the field of Higher Education, Science and Technology.

The Strategy for Development of Higher Education in Kosovo (2005-2015) prepared by MEST addresses also the issue of research as the extent that is linked to higher education.

One of the six objectives defined in this document is to improve the capacity for scientific research. Based on strategy the following measures are recommended to achieve this objective: conceptualize new policies, amend existing legislation supporting the research and scientific activity, build institutional and intellectual capacity, set standards for research and scientific work, find the needed funds and provide appropriate incentives.

So far, no policy was adopted or specific measures taken to improve research cooperation and integration into the European Research Area.

c. Kosovo Environmental Action Plan

In parallel to the Strategy, work on the Kosovo Environmental Action Plan (KEAP) commenced. KEAP is a document that provides practical steps for the implementation of the Strategy. The basic principle underlying the development of KEAP was integration and respect of all existing relevant policy documents. Thus KEAP reflects the overall high priority given to the process of EU approximation.

The KEAP document takes into consideration the following issues:

- The directives of Chapter 22 of the Environmental *Acquis Communautaire*;
- The structure and the idea of the EU's 5th Environmental Action Program (EAP)
- The elements of the 6th EAP are included in the document whenever this was considered to be relevant and realistic under the national circumstances at the time of writing
- The elements from main international conventions and protocols.

KEAP have foreseen that Agriculture sector is neglected and most of the agriculture products are being imported.

d. Law on Organic Farming

According to this Law organic products shall be regarded bearers of indicators referring to the organic production method, where in the labelling, advertising material or

related documents, such a product, its ingredients or feeding materials are described in terms of Organic Farming providing purchaser how that production or its components are presumed in accordance with the rules of organic production as specified in this Law.

e. Law for Veterinary

The purpose of this Law is to regulate the combating and prevention of infectious animal diseases, veterinary medical practice, the circulation of products of animal origin, veterinary control of the import, the export and transit of live animals and products of animal origin, and determine the rights and obligations of public and local government institutions, as well as of individual persons, in this field.

f. Law on food

This law shall apply at all stages of production, processing, storage, and distribution for human consumption and feed, except in primary production for private domestic use, or to the domestic preparation, handling, or storage of the food for domestic use, not intended to be placed in to the market.

2.1.1. The overall Agro-food policy framework

Kosovo has a new Agro-food legislation which is harmonised to European agro-food principles. However, the agro-food legislation continues to be completed and improved to respond in most effective manner to food safety and quality. However, completion with official personnel for the agro-food sector is planed by the government as one important instrument for development of agro-food policies. The main challenge is implementation of the laws.

Table. 7. Approved Laws related to the Agro-food sector in Parliament of Kosovo

Nr.	Name of Law	Law No.
1.	Law for Seeds	2003/5
2.	Law for Farms cooperative	2003/9
3.	Law on Food	03/L-016
4.	Law for Artificial fertiliser	2003/10
5.	Law for Seedling material	2004/13
6.	Law for Veterinary	2004/21
7.	Law for Forestry	2004/29
8.	Law for Livestock	2004/33
9.	Law on Animal welfare	02/L-10
10.	Law on Wine	02/L-8
11.	Law for the Irrigation of Agriculture lands	02L-9
12.	Law on Arable land	02/L-26
13.	Law on Hunting	02L-53
14.	Law on Fishery and aquaculture	02/L-85
15.	Law on Plant protection	02/L-95
16.	Law on Organic farming	02/L-122
17.	Law on Beekeeping	02/L-111
18.	Law on Protection of plant varieties	02/L-98
19.	Law for Products for plant production	03/L-042
20.	Law on Agriculture inspection	03/L-029
21.	Law on Agriculture and rural development	03/L-098
22.	Law on Pesticides	03/20
II	Project Laws approved in principle from Parliament of Kosovo	
1.	Project Law on Genetic modified organisms	2003/09/169
2.	Changes and completion of Project Law on Forestry	2003/9
3.	Project Law for commiseration	

2.1.2. The elements of Agro-food research policy making

Budgetary allocation for scientific research and technological development in 2008 from Kosovo Government was less than 0.1 % of GDP. However, this amount is not purely dedicated to research, but includes salaries, goods and services, and public utilities for research institutions under the authority of MEST. There are several national strategies created by the MAFRD, MoH, MESP and MEST , but they are not research strategies and there is no department or another body responsible for scientific research.

Kosovo already has an Agriculture Rural Development Plan in accordance with EU-policies. ARDP 2007-13 was approved by Government in April 2007, ARDP 2009-13 is an update of ARDP 2007-13. The Agriculture and Rural Development Plan (ARDP), 2007-2013, is a medium term strategy document which aim is to support the development of the agro-rural sector and bring it in line with the agro-rural sector of the EU.

The strategy was prepared using the same EU policy development framework, to prepare Kosovo to meet with the EC requirements and to be able to use the pre-accession structural funds in the future. The strategy document was prepared and adapted to the situation of the agricultural sector and challenges of the Kosovo rural population. This means that implementation of this strategy will not foster an agriculture based development through enhancing and improving the capacities of the agriculture or farming population, but it combines it with other components such as increasing competitiveness of the sector through value adding activities, environment protection, improving the quality of life in rural areas, creating conditions for the development of other non farm activities etc.

The objectives defined within the strategy cover highlighted components, and they are:

- To ensure additional income for the farmers and rural population, which leads to better living and working conditions,
- To improve competitiveness of the agricultural production and substitute imports and export to other markets,
- To add value to agriculture products by improved processing and marketing activities,
- To apply quality and safety standards at farming and processing level,
- To support sustainable development and improve the quality of life through promotion of farming and other non farming activities without causing any damage to the environmental resources,
- To support rural diversification as a way of creating employment opportunities for rural dwellers and
- To align Kosovo's agriculture with that of the EU.

This strategy envisages the sustainable development of Agri-rural sector of Kosovo, in line with that of the EU and it consists of 4 axes and 8 measures.

2.2. Overview of Agro-food research activities

This overview presents research projects in the area of agro-food, major research topics and the infrastructure for agro-food research. Agro-food research activities in Kosovo are conducted mainly on personal initiatives at some faculties of the University of Prishtina, respectively in Faculty of Agriculture and Veterinary and Faculty of Natural and Mathematical Sciences (Departments of Biology and Chemistry). These research activities, with very few exceptions, are not supported by any research grant from government, university or industry. So far, institutions had insufficient interest to use opportunities available for the development of research area; such is 7th Framework Program of the European Commission.

2.2.1 Agro-food research projects

There is presently no research project in the agro-food sector funded through the MEST, MAFRD, MESP, MoH nor the KASA.

In last decade of post war Kosovo, there were two possible investments for agro-food sector, including here: Capital outlays (construction), maintenance, trainings, legislation, visits etc.

1. Donations (USAID, GTZ, AER, EU, Swedish International Development Cooperation Agency (SIDA), etc.)
2. Research projects Austrian Science Office (ASO), USAID and South East European Development Network SEEDNet)

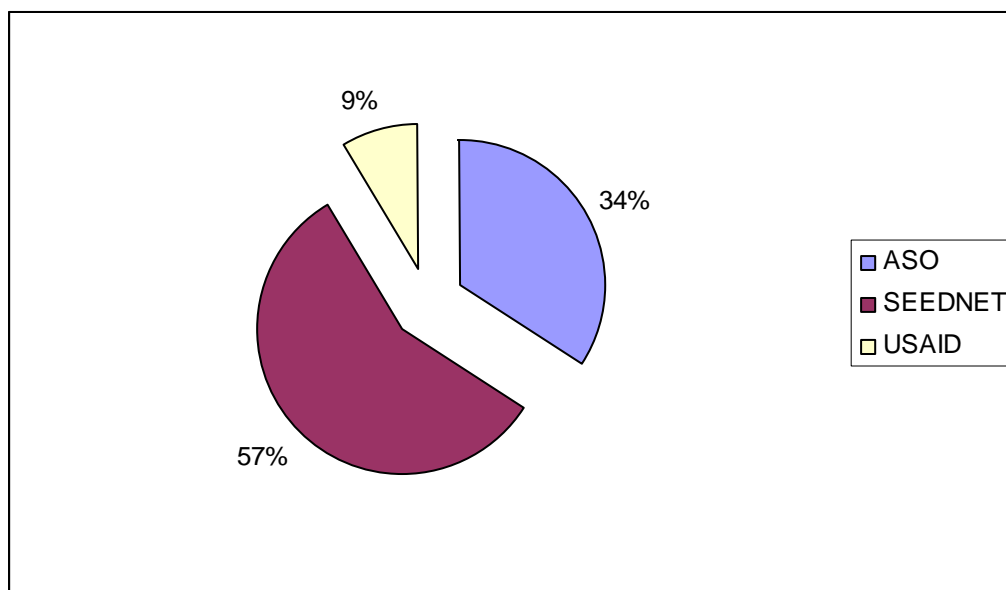


Fig. 5. Percentage of funds for research projects

These are few research projects which have been implemented in couple during last years, and some of them are still in progress. These research projects are implemented in cooperation with different Universities mainly located in South-East Europe and EU, especially Austria.

List of ongoing and completed research projects:

- *Influence of the environment on the quality of peppers and tomatoes in Kosovo and Monte Negro* (ASO, 2008), Faculty of Agriculture and Veterinary, University of Prishtina, University of Natural Resources and Applied Life Sciences (BOKU) and Faculty of Agriculture, University of Montenegro
- *The influence of the location on the quality of peppers and tomatoes in Kosovo and Bosnia and Herzegovina* (ASO, 2009), Faculty of Agriculture and Veterinary, University of Prishtina, University of Natural Resources and Applied Life Sciences (BOKU) and Faculty of Agriculture, University of Bosnia and Hezegovina

- *South East European Solanaceae Germplasm Collection, Conservation and Sustainable use* (SEEDNet 2007-2008), Faculty of Agriculture and Veterinary, University of Prishtina
- *Collection, Characterization and regeneration of indigenous onion (*Allium cepa* L.) and leek *Allium porrum* L. germplasm for further ex-situ conservation* (SEEDNet 2007 – 2008), Faculty of Agriculture and Veterinary, University of Prishtina
- *The influence of the location on the Nitrates and Nitrites content in vegetable under Kosovo conditions* (KAIP, 2009 – 2010, on going), Faculty of Agriculture and Veterinary, University of Prishtina and University of Natural Resources and Applied Life Sciences (BOKU)
- *Improving organic fruit growing in Kosovo and Albania* (2008-2009), Agriculture University of Tirana, Faculty of Agriculture & Environment, Faculty of Agriculture and Veterinary, University of Prishtina and University of Natural Resources and Applied Life Sciences (BOKU)
- *Creation and selection of new wheat breeding lines in Kosovo* (2009-2010, ongoing), Faculty of Agriculture and Veterinary, University of Prishtina and University of Natural Resources and Applied Life Sciences (BOKU)
- *Development of Livestock sector through establishment of an Artificial Insemination Centre for Cattle breeding*, WYG International and MAFRD
- *Cooperation in academic, scientific and professional fields between Faculty of Agriculture & Veterinary in Prishtina and University of Natural Resources and Applied Life Sciences, Vienna*, Supported by Kosovo Austrian Internationals Projects (KAIP), Faculty of Agriculture and Veterinary, University of Prishtina and University of Natural Resources and Applied Life Sciences (BOKU)

European Community support to Kosovo started in 1998 through the implementation of projects funded through the European Agency for Reconstruction (EAR).

1998-2003: € 55.1 million EAR provided assistance to MAFRD to: strengthen advisory support services to farmers and agribusiness enterprises; develop agricultural statistics to improve policy formulation at the ministry; support the production, distribution and marketing of seed and planting materials to EU standards; and manage agricultural information campaigns. Support has been provided for the transformation of publicly owned irrigation water providers into self-sustainable enterprises to ensure the effective management and sustainability of Kosovo's irrigation system – substantially rehabilitated with EC assistance. The Agency also supported the establishment of a rural microfinance scheme to provide loans to farmers and small rural enterprises.

2004: € 4.0 million The EAR's 2004 Rural Development programme focused on revitalising the rural economy. The Agency assisted MAFRD and municipal agriculture offices to improve the planning and implementation of agriculture policies. This includes development of an Agriculture Master Plan for Kosovo, a two year project that started in November 2004. MAFRD and the Ministry of Health are establishing an effective food safety control system to EU standards through an EAR project that started in June 2005.

2005: €9.2 million In 2005, EAR is focusing on institution building (Kosovo Centre for Livestock Breeding, Marketing Support and Land Utilization). The Agency is supporting the work achieved by the SASS project and the AMPK project in delivering advice to rural communities. Assistance to the tertiary irrigation sector will be provided.

2006: €5.0 million Three projects have been accepted for EAR's 2006 programme that will provide a platform for the implementation and institutional support of ARDP 2007-13.

The three projects will help align Kosovo's rural sector with the EU's rural development strategy for 2007-13. This is based on four major axes: increasing the competitiveness of the agricultural sector through support for restructuring; conserving of the environment and countryside through support for land management, (including rural

development actions related to Natura 2000 improving the quality of life in farm sector and other rural actors; and preparing community level local development strategies.

Previous Actions without European Community Assistance

Other donors have implemented/are implementing projects that complement those of EAR's Rural Development programmes, examples of which are summarized below:

FAO/IBRD previously provided grant support for the distribution of fertilisers and seeds, as well as for the vaccination of livestock, the repair of agricultural machinery, the reestablishment of forests and the import of tractor/implements and cows to restock the cattle herd.

FAO helped in rehabilitating veterinary services, primarily through establishing a central veterinary diagnostic laboratory in Pristina. They also managed a grant support, advisory and training programme primarily aimed at rural micro enterprise development and capacity building. With bilateral support from Luxembourg, FAO is implementing a project in the remote mountain areas in and around Dragash.

SIDA The Swedish International Development Agency (SIDA) is mainly involved in supporting the forestry sector. With FAO, SIDA is providing support for forest institutions and legislation. SIDA is supporting forestry education and training in Kosovo on a bilateral basis.

Norway The Norwegian government is implementing a project to support forest management using GIS technology.

GTZ The German government has supported integrated rural development activities, focussing on cheese and fish production and marketing.

USAID is implementing the "Kosovo Cluster and Business Support" programme (KCBS). In relation to agriculture, the target sectors are dairy, beef, poultry, animal feed, fruit and vegetables. The approach of the project is to identify problems between the farmer and final consumer, and provide specific technical and other support in order to solve them.

Swiss aid has two relevant programmes in Kosovo. The Swiss intercooperation fruit and vegetable marketing project has produced useful pilot programmes related to price information collection and dissemination systems, and also for the introduction of new fruit and vegetable varieties, packing and branding. The Swiss Contact dairy project has also prepared useful data on prices and standards, as well as developing encouraging links between

processors and dairy farmers in order to improve the overall quality and quantity of milk supplied.

KFOR/CIMIC has a programme that is helping to establish farmer associations. The approach is based on making milk cooling available to participating groups of suppliers. The resulting groups require additional support, particularly in relation to development of business and marketing plans.

Mercy Corps is implementing with MAFRD a project to support the creation of six producers' Associations in selected municipalities (Agriculture and rural development plan, 2007-2013, 2006)

2.2.2. Key competencies in Agro-food research fields

Presence of researchers in the specific fields of science, the broad spectrum of diseases of plants, animals and humans as well as emerging and reemerging diseases (plants, animal and humans) in Kosovo pose a significant potential in agro-food research field. However, the available research results are poorly transferred into practical interventions in the field.

The key drivers for agro-food research come from the public sector. Collaboration on agro-food research between research institutions and commercial companies is extremely low. The contribution of the private sector to the agro-food research is minimal, but there is opportunity to increase it in near future.

Kosovo has an agro-food system that has undergone numerous reforms in all levels. Although, overall research capacity is limited, the analysis suggests that the country's key competencies are in the following areas:

1. Food safety and quality
2. Plant production
3. Plant protection
4. Race improvement and feed of animal
5. Animal health and their production
6. Increasing the production and use of forestry

2.2.3 Agro-food research infrastructure

Research and higher education

Scientific research activities in Kosovo, including the field of agro-food, are carried out in many institutions. Research institutions in the S&T field of agro-food in Kosovo are divided in two groups:

Research institutions (University / higher education research institutions)

Faculty of Agriculture and Veterinary

Faculty of Mathematical and Natural Sciences

Faculty of Mines and Metallurgy

Public research institutes

Kosovo Academy of Sciences and Arts

Kosovo Institute of Agriculture

Laboratory analyses, public:

National Institute of Public Health of Kosovo

Kosovo Veterinary and Food Agency

Hydrological and Meteorological Institute

Laboratory of Wine

Laboratory analyses, private:

Agrovet

Sara & Med

The key institutions performing research in agro-food are primarily Faculty of Agriculture and Veterinary and Kosovo Institute of Agriculture. For a full list of agro-food research groups in Kosovo with contact details see Appendix I.

Table. 7. Number of agro-food research groups identified, October, 2009

	Number of research groups	Research groups (%)
Universities higher research educations	3	27.3
Public research organizations	6	54.5
Private research organizations	2	18.2
Total	11	100

The University of Prishtina was founded in 1970 and is one of the public Universities in Kosovo. It has 17 faculties with approximately 35.000 students. Starting in the academic year 2001/2002, the University of Prishtina adopted the two-tier system of studies as prescribed by the Bologna Declaration. International cooperation is one of main priorities of the University of Prishtina and is focused on intensive participation in various programs. The University of Prishtina has signed 80 cooperation agreements with other universities all over the World. Teaching and research in the University of Prishtina represent the main activity of the University, respectively its mission pursuant to article 5 of the Prishtina University statute.

However, there is little evidence of organized scientific activity at the University and of any strong links between research and teaching component.

The Department of Technology, course of Food engineering is established into the Faculty of Mines and Metalurgy two years ago, and they still did not completed the laboratory and researches infrastructure

Kosovo Academy of Science and Arts was founded in 1975. Today it is the supreme institution in the field of sciences and arts in Kosovo. It consists of four sections:

Language and Literature,

Social sciences

Natural sciences and

Arts

A minimum support in agro-food research in Kosovo was given by the international governmental and non-governmental institutions. Other institutions involved in agro-food sector, including scientific research are: ASO, USAID, SEEDNET (see Appendix II).

There is almost no research conducted by agro-food industry and enterprises in Kosovo. Processing companies are the main sponsors of scientific events but they did not establish a system of research grants so far.

The NGO sector comprises of several associations providing input for agro-food policies. This is emphasized through collaborative projects sponsored by international donors in the field of production and processing. NGOs regularly organize fairs, roundtables, and debates focusing on various issues from research perspective.

The National Agricultural Research System (NARS) of Kosovo is composed primarily of the Faculty of Agriculture & Veterinary of the University of Prishtina, and the Kosovo Institute of Agriculture (KIA) located in Peja, There is also a Forestry Institute at Peje. The Faculty of Agriculture at the University of Prishtina is responsible for teaching, research, and transfer of knowledge extension services. The Faculty has six Departments:

- Field Crops and Vegetable
- Livestock,
- Fruit Trees and Vineyards,
- Plant Protection
- Agro economy and
- Veterinary

There are also general subjects, mechanization, food technology and soil sciences.

Curricula follow the Bologna System. There are 33 professors, 12 associate and assistant professors, 14 lecturers and 32 technicians. There are 800 students. The Faculty cooperates with universities in Albania, Germany, Italy, Austria, Norway etc, and in the Balkan region.

Faculty of Agriculture and Veterinary is under preparation to open a new department for the academic year 2010/11: the department of Biotechnology.

Kosovo Institute for Agriculture (KIA) is a public research institution founded in 1947, which operates as part of MAFRD. It is a complex of 12 Laboratories clustered in three laboratory facilities, as well as a research station of 170 ha arable land.

KIA's main function is focused on Applied and adaptive research on:

- Plant production and protection
- Animal husbandry
- Seed testing
- Laboratory analyses of agricultural inputs and products of plant and animal origin and
- Training and advisory services.

KIA has been operating in the last few years on a very limited scale. Due to this, current activities are limited to seed testing, variety trials (wheat, barley, corn, potato) and laboratory analysis of soil, fertilizer animal feed and crop products (grain, wine etc.).

Most food analyses are carried out in the National Institute of Public Health of Kosovo (NIPHK) and the Kosovo Veterinary Food Agency (KVFA).

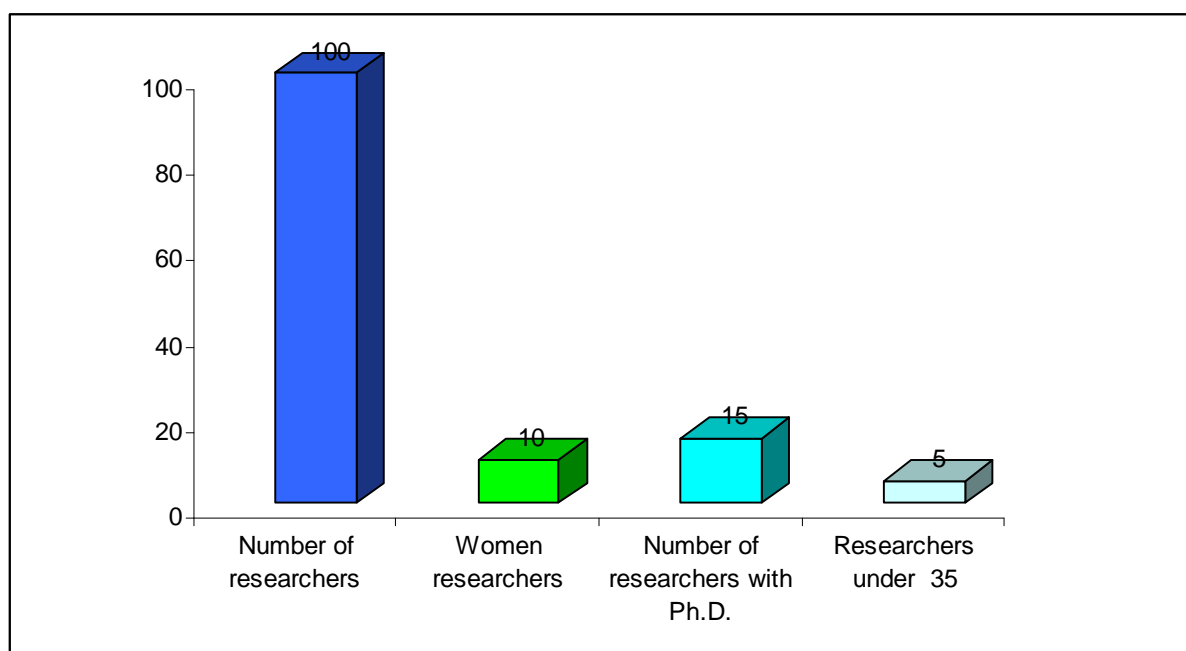


Fig. 6. Estimated number of Agro-food researchers, 2008-09, October, 2009

Kosovo's laboratories cooperate regionally with:

- Veterinary Faculty Laboratory in Skopje for residues;
- Veterinary Faculty Laboratory in Ljubljana;
- Agricultural Institute Slovenia and
- SQTS – Switzerland.

For List A Diseases, Kosovo works with reference laboratories from the OIE and FAO list. Government has allocated land for construction of a new laboratory with International Organization for Standardization (ISO)17025 standards. No laboratories are certified or harmonized in line with EU standards.

The main focus in the future will be proposals for regional cooperation in research and higher educations are as follows:

- Focus research on technology transfer (rather than on technology generation), working with research institutes/universities in other countries and in country.
- Use technology that has been tested and adopted by farmers in neighbouring countries, or under similar agricultural conditions.
- Base technology selection on assessment of farmers' needs, emphasizing market oriented production technologies.
- Strengthen the research institutions capacity in food quality control, seed testing and certification, agricultural input analysis and control activities, soil analyses, training and dissemination of information.
- Undertake technology identification, assessment and diffusion cost effectively within a regional university/research collaborative framework.
- Develop incentives to recruit young national scientists, including postgraduate programmes, as well as regional exchange programmes for existing research staff and on the job training for field and laboratory technicians (Master plan for agriculture, 2007).

2.3. Key drivers of Agro-food research

Agro-food research activities in Kosovo are conducted mainly on personal initiatives at some faculties of the University of Prishtina, respectively in Faculty of Agriculture and Veterinary, Faculty of Natural and Mathematical Sciences (Departments of Biology and Chemistry) and Kosovo Institute of Agriculture. The main Key drivers suppose to be from the public sector and they will focus to advance the capacity for research and scientific work.

Expected outcomes:

- Legal package for development of science
- Mid-term government program for development of science
- A sufficient number of scientific research projects contributing to solving of societal problems
- System of postgraduate studies is organized in accordance with the objectives of Bologna Process
- Sufficient number of publications with international reviews
- Special funds to be allocated for scientific research
- Institutional infrastructure to be set up for scientific work (Medium-term expenditure framework 2006-2008, MEF)

2.3.1. Main Agro-food sector trends in Kosovo

The agro-food sector in Kosovo is dominated by the national public agro-food system, although the private sector is rising slowly.

Budget of the Ministry of Agriculture, Forestry and Rural Development, 2009, is 12.133 Euro together with KVFA. This budget includes salary for staff, capital investments and another cost for MAFRD needs.

Table. 8. Expenditures of Kosovo Agencies

	(Million of Euro)						
	2003	2004	2005	2006	2007	2008	2009
Ministry of Agriculture, Forestry and Rural Development	2.3	2.7	4.8	5.9	6.5	9.4	12.1

Source: Treasury, Ministry of Finance and Economy

Note: Designated Donor Grants are not included

The overall objective of agro-food policy in Kosovo is to create an efficient system that operates with the scarce resources available. Also, there is a need for new human capacity in the research sector that will upgrade the current picture of agro-food production and agro-food research.

The crop harvests usually are used for households, for the human consumption 2/3 to 3/1 and other production for the animal feed. The large and specialised farms use a slightly larger share of crops for animal feed than the small farms as they are more specialised in livestock production.

Table. 9. Average use of harvested crops by region in percent

Region	Household needs	Animal feed	Sold	Processed/than sold	Lost
Kosovo	69.0	21.6	5.6	0.4	3.5
Prishtine	74.6	18.9	4.8	0.2	1.5
Mitrovice	70.6	21.3	5.3	0.3	2.6
Peje	67.5	20.7	8.6	0.1	3.1
Gjakove	62.5	22.4	9.8	0.5	4.8
Prizren	62.7	27.5	5.9	0.0	3.9
Ferizaj	78.6	15.5	3.0	0.1	2.9
Gjilan	66.2	24.8	1.9	1.4	5.6

Source: Statistical Office of Kosovo, 2006

2.3.2. Main socio-economic challenges in Kosovo

Due to the many difficulties over the last two decades and in particular through the post conflict period, Kosovo faces many economic developmental challenges. Underlying economic growth potential in Kosovo is roughly 3.0 – 4.0 % per year. Unemployment is of the order of 35 – 40 %. Currently some 29.000 young people are entering the labour market every year. Even if the economy could move to a permanent growth rate of say 6.0 %, in ten to fifteen years time, unemployment will only have halved. This simple observation defines the real economic development challenge for Kosovo.

At the same time, it is estimated by the WB that perhaps as much as 45 % of the population may well live in a broadly defined state of poverty. Thus it is clear that even if economic growth is increased markedly and sustained through the longer term, there will be

an underlying and continuing social challenge that must be addressed. In a very real sense, this is what can be called a ‘baseline’ policy priority.

Kosovo’s initial position contains a number of strengths. It has a young population, and significant natural resources. The social structure is characterized by the existence of networks both formal and informal that provide safety nets for the poor and the unemployed.

The foundations for a liberal market economy and modern system of accountability are in place and international partners are supporting many dimensions of the developmental process.

Table. 10. Macroeconomic indicators for period 2004-2007

Year	2004	2005(v)	2006(v)	2007(P)
Country accounts				
Real increase of GDP	3.2	0.6	4.2	3.6
GDP per capita (euro)	1,152	1,115	1,136	1,168
Investment (% GDP)	29.9	30.2	31.1	34.6
Gross domestic saving (% of GDP)	-19.3	-23.0	-23.3	-24.3
Overall Government budget				
Overall budget (% of GDP)	- 6.1	- 3.1	3.5	3.9
Foreign accounts trade balance				
Foreign accounts trade balance	- 43.4	- 47.4	- 50.1	- 53.6
Actual account balance (% of GDP)	- 37.8	- 38.7	- 38.2	- 42.9
Foreign assistance (% of GDP)	25.0	22.8	20.9	19.5
Deliveries from outside (% of GDP)	10.3	13.1	14.5	14.5
Prices Inflation CPI	- 14.0	- 1.4	1.5	2.0
Memorandum GDP (million Euro)	2,263	2,228	2,310	2,415

Source: World Bank report, Kosovo Interim Strategy, 2007

(Note: data for 2004-06 are estimations, data for 2007 are forecast. Current balance presents an amount before receive of international assistance.

Recovery of agriculture has been quite rapid taking into account the low resources allocated to agriculture. In 2002 the effective budget for agriculture was only 0.6 % of total public expenditure. During years budget allocated to agriculture was increased: by 41.2 % from 2005 to 2006; by 20 % from 2006 to 2007; and by 35.2 % from 2007 to 2008. Unfortunately, compared with share of the total budget of Kosovo Consolidated Budget (KCB) is approximately same percentage and when we analyze the population structure and other indexes (poverty, agriculture and rural population, contribution on GDP, climatic conditions etc.), simply conclude that Agriculture could also address unemployment problem.

Agricultural system has very strong potential to commercialize and increase employment and income. To achieve EU standards of developments, agricultural sector has already for some sub-sectors legislative base, according to the EU and international norms. Kosovo is part of the Central European Free Trade Agreement (CEFTA).

Kosovo enjoys customs-free access to the EU through the EU, Autonomous Trade Preference (ATP) regime. At the end of 2008, the United States (US) designated Kosovo a beneficiary under the Generalized System of Preferences program, allowing certain Kosovo goods to enter the US duty-free. On the other hand some private companies are certified with Hazard Analyses Critical Control Points (HACCP), ISO standards and a lot of them are in the process of certifying as well as for organic production.

Table. 11. Macroeconomic indicators for period 2004-2007

Year	2004	2005	2006	2007
GDP per capita	964.0	1,438.0	1,476.0	1,573.0
Increase of GDP	3.2	2.0	3.9	4.4
Rate of unemployment	39.7	41.4	44.9	43.6
Budget revenues	634.8	638.4	712.0	896.4
Budget spending	769.4	696.1	635.5	662.7
Balance of govern. Budget	- 134.6	- 57.7	76.5	233.7
Size of foreign trade	1,086.9	1,156.3	1,363.7	1,671.3

Source: World Bank report, Kosovo Interim Strategy, 2007

3. Integration of Kosovo in the European Agro-food research

During the last 35 years Faculty (Institute) of food sector had continuity in scientific research and fruitful results recognized through many different activities and developed organisations units which covers all segment in Agriculture, as well as through respectable number of research staff, among which there are lot of young and enthusiast researchers.

Kosovo is not fully integrated in the FP7 Program, while the Government is discussing terms of participation in this Program and establishing the mechanisms needed for efficient cooperation (European Commission, Brussels, 2008). Nevertheless, there is no elaborate plan for the development of the Agro-food Research and Development (R&D) sector in the country neither for integration of the country in the European Research Area (ERA).

We should be focused to develop this sector to have more access in the projects of EU, so we could include EU funded mobility programmes directed in improvement of our projects in higher education and research.

However, after the war of 1999 changes in society of the Kosovo, had created possibilities for researchers and students to have contacts with different institutions from abroad (especially from EU countries). One of the main priorities of the faculties has been focused on establishment, maintaining and development of international cooperation in agriculture sector with similar scientific institutions, Universities and international organisations. It is important that international contacts and projects have been noticeably strengthened in recent years.

The research staffs has been trained in many prestigious European Universities and scientific institutions in Germany, France, Spain, Italy, Norway, Denmark, Bosnia and Herzegovina, Croatia and Macedonia.

Without deep research activities and authentic scientific results, it is not possible to manage transition of the Kosovo agriculture successfully and to contribute for its sustainable development. For Kosovo, with certain limitations, it is extremely important to use its institutional resources in effective and efficient way. It is challenge for research institution and main provider of scientifically proved services. In order to fulfil this role, the research institutions strengthen their human and technical capacities more intensively, especially by accepting and implementing principle and standards well established in recognisable EU research centres.

During all this period Faculty of Agriculture and Veterinary and other research institutions had an intensive international cooperation and projects realisation which were funded by ASO, USAID, SEEDNET, KAIP funds etc.

4. SWOT analysis

Methodology

In order to make a SWOT analysis for the agro-food sector in Kosovo, it was necessary to conduct a number of interviews with experts from this field. Their opinions along with previous research served as a basis for the construction of SWOT matrix.

The answers were analyzed by compiling the most frequently mentioned strengths, weaknesses, opportunities and threats and the answers mentioned by only one expert were disregarded as unimportant. During the interviews, the experts had to explain each point and provide reasons why they think a certain point is strength, weakness, opportunity or a threat. Besides experts' answers, the SWOT analysis included also a review of previous research in this area available in the literature.

4.1. Strengths, Weaknesses, Opportunities and Threats

Table. 12. SWOT chart for Kosovo agro-food sector

Strengths (S)	Weaknesses (W)
<ul style="list-style-type: none">▪ Fast growing rate after 1999▪ Agro-food legislation is established▪ Established legal framework for scientific research and higher education▪ Employment possibilities in agriculture▪ Positive trends in profilization of farmers and in increasing farm size▪ Growing interest in agro-food research▪ Good experiences in knowledge transfer	<ul style="list-style-type: none">▪ Inadequate programs of agro-food education▪ Inadequate allocation of budget for R&D▪ Sector of adult education is not satisfied▪ Relations between main stakeholders▪ Inadequate Stability in financing of agro-food research projects▪ Low investment in educational infrastructure

	<ul style="list-style-type: none"> ▪ Low number of available experts ▪ Co-operation between the institutions is low level ▪ Low competitiveness of small scale producers ▪ Insufficient organisation of production ▪ Negative trade balance in the sector ▪ Undeveloped distribution channels ▪ Limited public expenditure for S&T and R&D purposes and education ▪ Lack of financial resources in order to renew technologies ▪ Recognition of the role of science in the overall process of economic development ▪ Lack of national standards in the evaluation of research activities and accreditation of R&D organizations ▪ Motivation of young scientists ▪ Small number of realized research projects
Opportunities (O)	Threats (T)
<ul style="list-style-type: none"> ▪ Improvement of agro-food education ▪ Better cooperation of science and industry ▪ Higher involvement in European research area ▪ Better organisation of producers ▪ Adopting EU food safety standards 	<ul style="list-style-type: none"> ▪ In economic aspect the global financial crisis ▪ Low priority of the sector in scientific community ▪ Insufficient direct communication between research and industrial sector ▪ Limited financial resources for research

<ul style="list-style-type: none"> ▪ Agro-eco-tourism ▪ Accession to EU – availability of EU funds ▪ Establishment of private consultancy services ▪ Improvement of co-operation between producers, industries, research centres ▪ Increasing economic activity ▪ International Funding Opportunities ▪ Increasing research funding ▪ Increased scientific support to policy making activity ▪ Increasing networking opportunities ▪ Interaction of the education institutions with the business sector ▪ Linkages with the research systems of other countries 	<ul style="list-style-type: none"> ▪ Slow process of changes in the scientific research ▪ Increased competition resulting from EU accession ▪ Low investments in modernisation and infrastructure ▪ Lack of agro-food researchers ▪ Drop behind in integration processes and lack of support from the EU ▪ Ratio between applied versus basic research
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5. Agro-food research priorities for Kosovo

Research Agro-food priorities for Kosovo are driven by the national document for development policy goals set by the Kosovo government in the period 2007-2013. This document briefly presents development Strategy of the Agriculture and Rural Development Plan 2007-2013 with aim to show that Kosovo's ARDP 2007-2013 and its component, axes and measures are in accordance with European strategies. Another objective is to show, how agricultural sector during the years is giving more importance in sustainable development with particular attention on Organic production for healthy food.

Farmers in Kosovo have lack of support and most of them have traditional system of producing. Their intention is to be competitive on the market. Organic system will be

presented as new alternative for growth of incomes and protection of the environment, fertility and food safety. On the other hand as an alternative that is compatible with trends of the European market.

Also another objective is to show actual state of the sector of agriculture and the importance that is given to agriculture. Main data of the structure of the land ownership, farms, and agricultural population will be presented with the attention on the historical development of this sector which was vital for Kosovo economy and its intention on the future.

However, the main goal of this background report was to specify country agro-food research priorities which will be interconnected with other WBC and EU member States agro-food research priorities. In this case we are focused on the great lines of FP7 Work Program on the themes of agro-food.

We have made detailed analysis and guidance the following agro-food research priorities were proposed in terms of agro-food research areas, fields and sub-fields:

1. Food safety and quality
2. Plant production
3. Plant protection
4. Race improvement and animal fund
5. Animal production and health
6. Increasing the production and use of forestry

The detailed research priorities from each selected agro-food research fields:

1. Food safety and quality
 - Assurance scheme of products
 - Implementation of standards (HACCP, GLOBAL Good Agriculture Practice (GAP), ISO etc.)
 - Phytosanitary inspection of products
 - Residue of pesticides and heavy metals

2. Plant production

- New technology for production of crops
- Plant protection (protection and inventory of diseases, insects and weeds)
- Sustainable development
- Setting up of gene bank for genetic conservation of plants resources in Kosovo
- Soil degradation (bonity, fertility, pollution, erosion) and rehabilitation
- Impact of global changes on the effects on agriculture production

3. Plant protection

- Inventory of diseases, insects and weeds
- Preparation of Red Book of weeds in arable fields
- Pesticide residues in plants and soils
- Monitoring of main diseases, insects and weeds which are decreasing the yield of production

4. Race improvement and animal fund

- Improving the race of animals
- Animal breeding
- Animal feeds and feeding
- Animal welfare

5. Animal health and their production

- Defeating zoo noses
- Improvement of meat production
- Rational/controlled use of veterinary Products
- Fast methods for detection of microorganisms

6. Increasing the production and use of forestry

- Afforestation in mountains
- Protection of trees against diseases and pests
- Protection from erosion

5.1. Agro-food research priorities on the basis of the country's readiness*

After some data's from Agro-food sector, and based on existing infrastructure, human capacities, recent performance and further research capacity strengthening, the top field in the Kosovo Agro-food research sector include these numbering priorities:

1. Food safety and quality
2. Plant production
3. Race improvement and animal fund

1. Food safety and quality

- Assurance scheme of products
- Implementation of standards (HACCP, GLOBAL GAP, ISO etc.)
- Phytosanitary inspection of products
- Residue of pesticides and heavy metals

2. Plant production

- New technology for production of crops
- Sustainable development
- Inventory of diseases, insects and weeds
- Preparation of Red Book of weeds in arable fields
- Pesticide residues in plants and soils
- Monitoring of main diseases, insects and weeds which are decreasing the yield of production
- Setting up of gene bank for genetic conservation of plants resources in Kosovo
- Soil degradation (bonity, fertility, pollution, erosion) and rehabilitation
- Impact of global changes on the effects on agriculture production

3. Race improvement and animal fund

- Improving the race of animals
- Animal breeding
- Animal feeds and feeding

5.2. Agro-food research priorities on the basis of future potential**

1. Food safety and quality
2. Plant production
3. Plant protection
4. Animal health
5. Race improvement and feed of animal
6. Increasing the production and use of forestry

Concluding remarks

Agriculture is an important economic sector in Kosovo, but investments in the agro-food industry remain low in last decade.

The sector is dominated by state-owned institutions (universities and public research units), which not receive institution financing. The number of researchers in the agro-food sector is estimated about 100 and most of them are at the University of Prishtina.

For Kosovo, as small country with certain limitations, it is extremely important to use its institutional resources in effective and efficient way. The main objective in future will be to support the agro-food research close to market-oriented and competitive.

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Annex I: Agro-food research institutions in Kosovo, public sector

	Name	Postal address	Web-site
1.	University of Prishtina, Faculty of Agriculture and Veterinary	Rr. „Bill Clinton,, p.n. 10000, Prishtina, Kosovo	http://web.uni-pr.edu
2.	National Institute of Public Health of Kosovo	Rrethi i spitalit, p.n. 10000 Prishtina, Kosovo	http://niph-Kosovo.org
3.	Kosovo Academy of Sciences and Arts	Rr. Emin Duraku, nr. 1 10000 Prishtinë, Kosovo	http://www.ashak.org
4.	University of Prishtina, Faculty of Mathematics & Natural Sciences	Rr. “Nëna Terezë”, nr. 5 10000 Prishtinë, Kosovo	http://fshmn.uni-pr.edu
5.	Kosovo Institute of Agriculture	Rr., Fidansishtja,,No 39, Peje,	http://www.ks-gov.net/mbpzhr/
6.	Kosovo Veterinary and Food Agency	Rr., Lidhja e Pejes,, p.n. 1	http://www.ks-gov.net/mbpzhr/
7.	Laboratory of wine	Rahovec	http://www.ks-gov.net/mbpzhr/
8.	Kosovo Institute of Hydro-Meteorology	Rr. „Bill Clinton,, p.n. 10000, Prishtina, Kosovo	http://www.ks-gov.net/mesp/
9	University of Prishtina, Faculty of Mines and Metallurgy	Mitrovica	http://web.uni-pr.edu

Annex II: Agro-food research institutions in Kosovo, private sector

	Name	Postal address	Web-site
1.	Agrovet Laboratory .	,Rr. Naum Veqilharxhi,, nr. 15. 12000 Fushe Kosove	http://agrovet-lab.org
2.	Sara & Meti Laboratory of Agriculture	Prishtina	http://www.saraa-meti.tk